

Patent Abstracts of Japan

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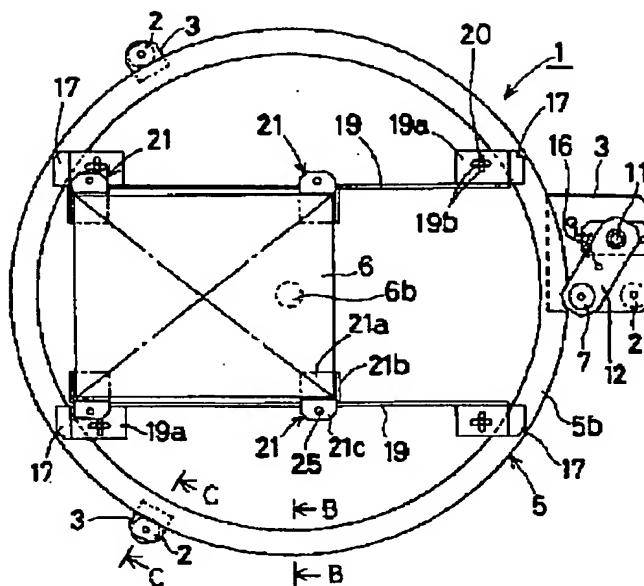
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TITLE : METHOD AND APPARATUS FOR
MEASURING DENSITY AND
MOISTURE OF SOIL



ABSTRACT : PROBLEM TO BE SOLVED: To detect the dose of a radiation source by inserting a measuring unit having a radiation source rod projecting from the bottom face into the ground and then turning the measuring unit about the radiation source rod while sustaining the horizontal state.

SOLUTION: The measuring apparatus 1 comprises a supporting leg 2 mounted on the ground, a level adjusting base 3 screwed movably up and down over the supporting leg 2, a fixing frame 4, a rotary frame 5, a measuring unit 6, and a drive motor 7. A radiation source rod 6b incorporating a radiation source is disposed on the bottom face of the measuring unit 6. A part to be measured is flattened and a radiation source insertion hole is drilled into the ground. Subsequently, the frames 4, 5 are installed and a plate for rotational alignment is mounted on the supporting base 21 of frame 5 and the position of a supporting plate 19 is adjusted to align the radiation source rod 6b with the radiation source insertion hole before the height of supporting base 21 is adjusted. The height of frame 4 and the horizontal state of measuring unit 6 are adjusted thus setting the measuring unit 6. Finally, the motor 7 is driven to turn the measuring unit 6 thus performing the measurement.

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